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## RESEARCH ARTICLE

# Using planning powers to promote healthy weight environments in England [version 1; peer review: awaiting peer review]

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## Abstract

**Background:** The prevalence of obesity in English adults and children has reached critical levels. Obesity is determined by a wide range of factors including the environment and actions to reduce obesity prevalence requires a whole systems approach. The spatial planning system empowers local authorities to manage land use and development decisions to tackle obesogenic environments.

**Methods:** This research aimed to better understand what and how planning powers are being utilised by local authorities to help tackle population obesity. It reviewed literature on the six planning healthy weight environments themes. It identified what powers exist within the planning system to address these themes. It collated professionals' perspectives on the barriers and opportunities through focus groups within local authorities and semi-structured interviews with national stakeholders.

**Results:** The research complements current research on the association between the environment and obesity outcomes, though methods employed by researchers in the literature were inconsistent. It identified three categories of planning powers available to both require and encourage those with responsibilities for and involvement in planning healthy weight environments. Through direct engagement with practitioners, it highlighted challenges in promoting healthy weight environments, including wider systems barriers such as conflicting policy priorities, lack of policy prescription and alignment at local levels, and impact from reduced professional and institutional capacity in local government.

**Conclusions:** The conclusions support a small but increasing body of research which suggests that policy makers need to ensure barriers are removed before planning powers can be effectively used to promote healthy weight environments as part of a whole systems

## Open Peer Review

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Any reports and responses or comments on the article can be found at the end of the article.

approach. The research is timely with continuing policy and guidance focus on tackling obesity prevalence from national government departments and their agencies. This research was conducted as part of a Master of Research at Leeds Beckett University associated with a national whole-systems to obesity programme.

### Keywords

Planning, healthy weight, environment, obesity, public health



This article is included in the [Healthy Lives](#) gateway.



This article is included in the [Sustainable Cities](#) gateway.

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## Introduction

When the Government Office for Science Foresight report on tackling obesity was published in October 2007, it projected public and professional awareness of escalating population obesity rates in the UK into the limelight. It estimated a rising trend over the next 40 years and that by 2050, 60% of adult men, 50% of adult women and about 25% of all children under 16 could be obese (Government Office for Science, 2007). Crucially it set out the case for change away from single-focused interventions and the balance of responsibility from the individual to a comprehensive, system-wide approach.

It was estimated that the National Health Service (NHS) in England spent £5.1 billion on overweight and obesity-related ill-health in 2014/2015 while local government child and adult obesity expenditure was estimated to be £99.7 million (Liu *et al.*, 2019). To put this in the context of local government financing, for example, in 2020/21 local government will receive £3.279 billion for all public health duties. The latest health improvement data from the Public Health Outcomes Framework for England shows 62.3% of adults are overweight and obese, and the National Child Measurement Programme (NCMP) shows 22.6% of Reception year children and 34.3% of Year 6 children are overweight and obese.

Compare this evidence of current obesity statistics against trend projections made by Foresight for childhood and adult obesity by 2025 and 2050, we can begin to see the scale of the challenge and need to take action.

The Foresight report advocated an approach centred on prevention and tackling what is termed the ‘obesogenic environment’. The obesogenic environment refers to environmental factors that promote gaining weight and that are not conducive to weight loss within the home or workplace (Swinburn *et al.*, 1999). Accordingly, tackling obesity has become a high-level

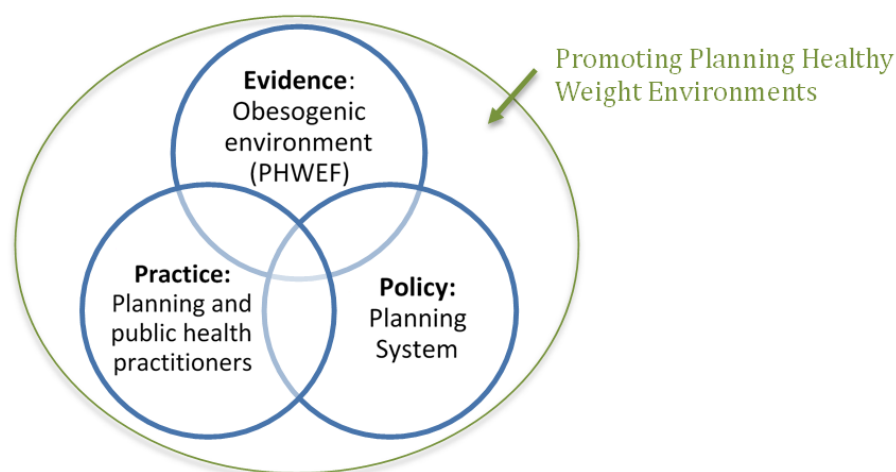
priority for the UK Government with the publication of the Childhood Obesity Plan: Part 1 in 2016 (DHSC, 2016). But it was not until Part 2 of the Childhood Obesity Plan published in 2018 that the government recognised and highlighted their support for local authorities using powers available to create healthier environments (DHSC, 2018).

UK parliamentary select committee inquiries on childhood obesity have consistently highlighted similar constraints within the planning system and call for government to give local authorities more powers to tackle, for example, issues concerning the restriction of hot food takeaways and the food environment (House of Commons Health Select Committee, 2015; House of Commons Health Select Committee, 2016; House of Commons Health Select Committee, 2017). Overall, there is an established recognition in government bodies and academia that local authorities possess a toolbox of regulatory powers to formulate policies and actions, which can influence obesogenic environments (LGA, 2015).

This paper focuses on research undertaken as part of a Master of Research between 2017 and 2019. The research sought to obtain a novel understanding of if and how the planning system and local authority practitioners in planning and public health departments can help promote a healthy weight environment (see Figure 1).

## Powers of spatial planning

The powers of the spatial planning system place responsibility on local authorities to manage the use and development of land for activities ranging from housing, retail, office, industry and transportation. Regardless of differences in legislative and policy contexts, the planning system is based on a systemic process and structure of national policy informing local policy and decisions on individual land use activities with involvement from multiple sectors of professionals and society. While planning alone cannot solve the obesity crisis, when



**Figure 1.** Research objectives and their relationship.

utilised effectively it can be a powerful tool for positively influencing healthy behaviours and providing healthy options through the built and natural environment (Hamidi & Ewing, 2020).

These powers have not been created purposefully to directly address public health outcomes including obesity reduction priorities. But the range of spatial planning policy requirements set out, for example in the English National Planning Policy Framework (NPPF) (MHCLG, 2019) and the [Planning Practice Guidance](#) on healthy and safe communities, have supported and continue to support locally-led action on tackling the environmental determinants of obesity (Ross & Chang, 2014). At the local level, local authorities have several powers at their disposal to direct public policy objectives towards promoting healthy weight environments, primarily through the statutory local plan, supported by further guidance (Blackshaw *et al.*, 2019) (see [Table 1](#)).

The use of the planning system as part of a wider inter-connected system of levers to tackle obesity (PHE, 2019) reflect what Allender (2010) suggested as the “growing agreement that obesity intervention must address the complex and interconnected mix of etiological factors from behaviours to social, built,

natural and economic environments”. A move towards whole systems thinking, first suggested in the Foresight Report and since developed and refined by Leeds Beckett University through the whole systems approach to tackling obesity project (Bagnall *et al.*, 2019; PHE, 2019), has been one of the most seminal developments in making sure actions to tackle obesity embrace coordinated action across sectors and disciplines.

### Planning healthy weight environments framework

This research uses the following definition of a healthy weight environment: “A healthy-weight environment supports people in avoiding being overweight or obese through how the place is designed and what it provides” (Ross & Chang, 2014). It takes, as the starting point, the planning healthy weight environments framework (subsequently referred to as the PHWEF) and its six themes created by the Town and Country Planning Association (TCPA) and Public Health England (PHE) in 2014 (see [Figure 2](#)), building on evidence identified by existing literature including Townshend & Lake (2017).

The six PHWEF themes are (Ross & Chang, 2014)

- A. Movement and access - measures aimed at promoting active travel.

**Table 1.** List of some local authority planning powers relevant to healthy weight environments.

	Planning power	How it can be useful for promoting healthy weight environments in planning
LEGISLATIVE	<b>Duty on sustainable development (Planning and Compulsory Purchase Act 2004)</b>	Contributes to achieving sustainable development in plan-making, ie LPA local plans. Sustainable development includes health and wellbeing considerations as set out in UK Sustainable Development Strategy and NPPF.
	<b>Duty on good design (Planning Act 2008)</b>	Desirability to achieve good design in plan-making, i.e. LPA local plans. Good design includes promoting healthy and accessible places as set out in the NPPF.
	Use Class Order (UCO) and permitted development rights	A national classification of land use activities which governs what activities and change of activities are permitted or would require permission, such as changing from a shop to a fast food takeaway outlet.
GUIDANCE	<b>National Planning Policy Framework (updated February 2019 version)</b>	National policy requirements on land use. It must be taken into account in preparing the local plan, and is a material consideration in planning decisions. It contains policy requirements on meeting local health needs and priorities.
	<b>Planning Practice Guidance</b>	Supports NPPF land use policies. It must be taken into account in preparing the local plan, and is a material consideration in planning decisions. It contains a section on promoting health and healthier food environments.
	<b>Local Plan</b>	Broad locations of land use activities; and topic-based policies to be taken into account when considering planning decisions. It can set policy considerations and requirements related to healthy weight environments.
	<b>Supplementary Planning Document</b>	Provides more detailed advice or guidance on policies in the Local Plan, including on health and wellbeing, active travel and food environments.
LEVER	<b>Planning conditions</b>	Included as part of planning permission to enhance quality of development.
	<b>Section 106 planning obligations</b>	Financial and non-financial contributions agreed with landowners/ developers to mitigate site-specific impact from development.
	<b>Travel plan</b>	Identifies specific outcomes, targets and measures, and future monitoring and management arrangements. It sets explicit outcomes (such as encouraging active travel). Required as part of planning application.
	<b>Design Code</b>	Sets out design principles aimed at delivering better quality place. Design codes provide a statement about the particular qualities of a place, and can help set out physical elements to promote healthy weight environments.

## Planning Healthy-Weight Environments – Six Elements



**Figure 2. Planning Healthy Weight Environments Framework and the six themes (Ross & Chang, 2014).**

- B. Open spaces, recreation and play - measures aimed at providing the informal and formal spaces and spaces necessary for leisure, recreation and play opportunities.
- C. Food - measures aimed at improving the food environment for access to, consumption and production of healthier food choices.
- D. Neighbourhood spaces - measures to improve the public realm and provision of community facilities to accommodate local programmes such as for physical activity, community activities or weight reduction.
- E. Building design - measures aimed at improving the internal design and quality of homes and building to promote living healthier lifestyles.
- F. Local economy - measures aimed at supporting people into local employment in accessible and healthy town centres or high streets.

### Methods

The critical role of practitioners is to interpret evidence, priorities and policy contexts. Actions through the spatial planning system on tackling obesity depend on their professional judgements and opinions which is reflective of the discretionary nature of the process (Tewdwr-Jones, 1999). How appropriate and effective they are is dependent as much on the practitioners as on the planning system (Carmichael *et al.*, 2013). A

qualitative approach was therefore employed, given the focus of the research was on the experience, meaning and perspectives of these practitioners (Hammarberg *et al.*, 2016).

The qualitative engagement component of the research took place between October and November 2018 and sought the views of local authority town planners, public health practitioners, and experts working at national and local levels. Full ethical approval (reference: 49649) was obtained in May 2018 from the Leeds Beckett University Local Research Ethics Co-ordinator.

### Local authority focus groups

Two focus groups were conducted with two English local authorities lasting for 1.5 hours. They were selected to represent different local government arrangements as a unitary and a two-tier authority.

Coordination for recruiting participants was carried out through the main contact in the public health team at each of the two local authorities with instructions to target the main audience groups relevant to the research. The audience groups were officers working in town planning, public health, transport, housing, and the natural environment and a total of 17 officers from two local authorities participated in the focus groups.

The focus group sessions took place in the respective offices of the local authorities during October 2018 over 1.5 hours. There were no presence of non-participants and all the participants



submitted research consent forms. The focus group discussions were recorded through audio to supplement field notes made by the researcher, and the discussions were not transcribed.

In conducting the focus groups, a semi-structured approach was designed to consider the challenges of planning for healthy weight environments. Questions explored participants' views towards the purpose of planning, and the challenges and opportunities in its orientation towards tackling public health issues such as obesity.

Focus groups were used as part of the mixed methods approach to help obtain and inspire insight into the topic areas (Ørngaard & Levinson, 2017). The flexibility in this semi-structured approach allowed for issues that were brought up by participants which related to their experiences to be further explored to gain a greater depth of knowledge (Sparkes & Smith, 2014). Although many issues were repeatedly raised during the focus groups as the researcher observed, it was necessary for the participants to be able to openly contribute and express their professional opinions without restrictions.

Results from the focus group discussions were supplemented with quantitative data through the use of a feedback form. The questionnaire of 15 questions (of which 10 required quantitative responses) was administered to every participant towards the end of the focus group to allow time for completion. The questionnaire supplemented questions asked during the workshops and additionally allowed participants to express the extent of their respective professional contribution to the agenda and their knowledge of healthy weight environments (Chang, 2020a).

### Expert interviews

In addition, six interviews were conducted with participants from different professional backgrounds, including national public health advisors, a professor of urban design and health, a national planning and design professional, and a local authority public health practitioner. The interview participants were selected because of their strategic perspective and experience or knowledge of planning and public health, particularly relating to obesity and the environment, and from one of the target professional groups (town planner or public health professional).

Interviews were held either face-to-face in the office setting of the interviewee or researcher or by phone, lasted from 30 to 60 minutes, and held in confidence. The interviews were semi-structured to explore the challenges of planning for healthy weight environments at a strategic and national level, and to obtain a strategic understanding of interviewees' awareness of the range of planning powers available in relation to obesity. The interview transcripts can be found in the *Underlying data* (Chang, 2020b).

### Analysis

Notes taken during focus group discussions were combined with the *active listening approach*. It required the facilitator to be attentive, friendly, understanding, responsive, and able to manage the flow of conversations (Bodie *et al.*, 2012), particularly

in different group sizes. The active listening method was combined with taking notes which were referred back to during data analysis using the thematic analysis approach (Vaismoradi *et al.*, 2013).

## Results and discussion

Responses from the questionnaire highlighted that the perceived current challenges and future threats to planning healthy weight environments were:

- Competing policy priorities
- Lack of people capacity
- Influencing local politicians
- Silo mentality among teams and professions
- Lack of financial resources
- Lack of leverage with external stakeholders
- Lack of awareness and availability of public health evidence

The following themes emerged from the focus groups and interviews:

### *Awareness of availability and potential of planning powers*

One interview participant suggested generally practitioners "don't know they do (have enough planning powers).. (but) those powers have limitations" (Interview Participant E4 - transport). Practitioners were mainly aware of the range of planning powers (Legislative, Guidance and Levers) but not their potential in promoting all or some of the PHWEF themes. Planners were able to readily cite planning powers available in their localities including and in addition to those highlighted in Table 1.

### *Availability and correlating evidence between environment and obesity*

The use of public health data as an evidence base in the planning system is a highly contested area during all stages of the planning process. Practitioners questioned the availability of the evidence-base to support decisions, in particular regarding the food environment. They further highlighted the lack of transferability in interpreting high level national and often international evidence for locality-specific planning policies, and for site-specific decision-making.

### *Competing policy priorities*

While the NPPF sets out planning's social role in supporting healthy communities, participants highlighted the imbalance in considering healthy weight environments and wider socio-economic issues. This imbalance is often manifested when economic and financial impacts take on prominence as a planning material consideration at the expense of people's health and wellbeing. One interview participant suggested that "if you look at the six strands (PWEF themes) you are talking about, at the moment, Buildings is more than anything else. And that is the highest priority. The economy is the second. So everything then takes a lesser priority level" (Interview Participant E3 - public health).

### *Prescription in policy*

Participants suggested the need for greater prescription in national policy and legislation to promote healthy weight environments. One interview participant suggested that “when you look at the guidance, it’s usually often a paragraph or a few lines. It’s not as prescriptive as it probably should be” (Interview Participant E2 - planning). As there is no explicit and direct national policy requirement for the planning system to address obesity as a specific planning objective or outcome, participants believed that the obesity problem would benefit from a more direct and explicit policy approach.

### *Local government resources and capacity*

Reduced local government finances to both planning and public health departments were thought to be having a material impact on the capacity to implement actions. This reduced funding across the local authority can impact on overall staff numbers, and their visibility and accessibility by external and within internal stakeholders to advice on and collaborate on several issues through the planning process including but not limited to public health, obesity and the environment. Participants also noted the impact of expenditure on new and improving existing facilities and services, such as parks and playgrounds, which in turn can exacerbate local childhood obesity and physical activity rates.

### *Training, capacity building and learning*

While the uniting of planning and public health systems originated from shared origins, participants were also concerned that there is no structured learning or opportunities to participate in building knowledge of each other’s systems and issues. Public health and planning professionals undergo structured education and assessment processes in order to secure academic and professional qualifications. But participants did not feel they had the appropriate practical knowledge of the ‘how’ to be able to take action. The knowledge and capability of practitioners were called into question and further training across all levels of education and continuing development was needed.

## **Conclusions and implications and actions for planning practice**

The implications of this research are profound for national policy makers, local practitioners, and the wider research community.

### **For the research community**

The research supports current and emerging evidence on the association between elements of the environment and obesity effect. But future research needs to gain a better understanding of the inter-connectedness of factors which underpin a healthy weight environment in a more consistent manner (Rutter *et al.*, 2017).

### **For policy makers at national and local levels**

The research supports the 2018 Childhood Obesity Plan statement that “each local authority already has a range of powers to find local solutions to their own level of childhood obesity

but while some are already taking bold action, others are not” (DHSC, 2018). At the local level this means supporting local authority spatial plans and policies being revised to include healthy weight environment matters, and investing in effective planning actions as part of area-based initiatives such as the Healthy New Towns (NHS England, 2019), Childhood Obesity Trailblazers (LGA, 2018), London School Superzones, Local Delivery Pilots, and Garden Communities (MHCLG, 2018) programmes. Ideally, to gain a better understanding of the inter-connectedness of factors which underpin a healthy weight environment, these would be supported by evaluation from academic institutions.

### **For practitioners in local authority public health and town planning teams**

For local authority practitioners tasked with implementing action to improve population health and reducing obesity, the research supports the proposition that planning powers already exist to tackle some or all of the PHWEF elements, but there are challenges in implementation. Overcoming these common challenges will require sharing knowledge, experience and collaboration to align actions on what is a set of complex societal and environmental issues.

In summary, the research has demonstrated and provided greater clarity on the specific contribution of the local authority planning function, with the support of public health activities, to tackling obesity by promoting healthy weight environments. There is already scientific consensus that living with excess weight is a risk factor for a range of chronic diseases, and impacting on people’s equality and access to quality of life. Also local authorities already have the planning powers to promote healthy weight environments. The time to act is now. The research findings are useful indicators of the current state of practice in order to progress beyond challenges to taking appropriate actions on planning healthier weight environments.

## **Data availability**

### **Underlying data**

FigShare: Focus Groups raw data feedback

<https://doi.org/10.6084/m9.figshare.13134899.v2> (Chang, 2020a).

This project contains the following underlying data:

- Stage Focus Groups feedback\_CHANG.xlsx (Data from anonymous responses received from the two local authority Focus Group participants)

FigShare: Interviews transcriptions

<https://doi.org/10.6084/m9.figshare.13134881> (Chang, 2020b).

This project contains the following underlying data:

- FINAL Interview Questions+transcriptions.pdf (Interview questions and transcriptions from each interview anonymised from national and local stakeholders and practitioners)

Data are available under the terms of the [Creative Commons Attribution 4.0 International license](#) (CC-BY 4.0).



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